

### **ABSTRACT**

A bioactive glass composition which contains  $\text{SiO}_2$ ,  $\text{Na}_2\text{O}$ ,  $\text{CaO}$ ,  $\text{K}_2\text{O}$ ,  $\text{MgO}$ ,  $\text{P}_2\text{O}_5$  and  $\text{B}_2\text{O}_3$ . The amount of  $\text{SiO}_2$  is 51-56 wt-% of the starting oxides,  $\text{Na}_2\text{O}$  is 6-9 wt-% of the starting oxides,  $\text{CaO}$  is 21-23 wt-% of the starting oxides,  $\text{K}_2\text{O}$  is 10-12 wt-% of the starting oxides,  $\text{MgO}$  is 1-4 wt-% of the starting oxides,  $\text{P}_2\text{O}_5$  is 0.5-1.5 wt-% of the starting oxides,  $\text{B}_2\text{O}_3$  is 0-1 wt-% of the starting oxides, provided that the total amount of  $\text{Na}_2\text{O}$  and  $\text{K}_2\text{O}$  is 17-20 wt-% of the starting oxides. Also disclosed is the manufacture and use of the bioactive glass composition.